

DII COE Segmentation Process Post V3.4

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Current NT Segmentation Options

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- **Full Segmentation**
 - Package Installation Executable using MakeInstall
- **Abbreviated Segmentation**
 - Use Logo Compliant Installer Package and Use COEInstaller to Subsequently Install I&RTS (SDF) data
- **Rely on Commercial Rules to provide the Knowledge/Discipline for Application Environment**
 - Make All Application Developers Submit Products to the Veritest Process to Determine “Compliance”

Current Segmentation Problems & Assumptions

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- **Log Compliant Installers by Themselves too Flexible**
 - **Developers Can Determine the Level Packaging Information for Segments**
 - **(None, Some, Lots)**
- **Logo Certification By Itself Does Not Address All Government Requirements**
 - **Conflict**
 - **Requires**
 - **Shared Government Resources**
 - **Security Classification**

Current Segmentation Problems & Assumptions

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- **In Many Cases, Developers must Package Segments Twice to Meet COE Compliance Rules and Insure Logo Compliant Registration**
 - **Defeats TCO Gains from Commercial Technology**
- **Enterprise Deployment with COE Installer is Very Difficult at Best**
 - **Individual Workstation Installation the Norm**
 - **No Support for the Future**
 - » **New Windows 2000 Installation Features (MSI, Active Directory, etc.)**

Segmentation Upgrade Objectives

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- **Create a Standard Application Installation and Validation Process for Use by NT Application Developers (Both COTS and GOTS) that is Logo Compliant**
 - Automate the Creation of the Installation Packaging
 - Provide Easy Interface for Inputting Logo Installation Requirements
- **Maximizes the Use of COTS Technology & Prepare for Windows 2000**
 - Zero Administration Workstation
 - Active Directory
 - Microsoft Installer
 - Intelli-Mirror

Logo Compliance Installation Requirements

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- **Provide WIN32 Compliant Graphical Setup**
- **Provide for Unattended Installation**
- **Support Installation from Multiple CD ROMS**
- **Support “Add/Remove” Applet**
- **Avoid the Need for Reboot During the Installation Process**
- **Detect and Handle Versions**
- **Handle Core DLL Usage Counters Properly**
- **Register and Uninstall File**

Logo Compliant Uninstall Requirements

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- **Complete Removal of Applications Files During Uninstall**
- **Removal of All References from the Start Menu**
- **Removal of Registry Entries**
- **Handle Core DLL Usage Counters Properly**
- **Removal of Uninstaller File as Last Step**

Recommended Application Descriptors

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- **Must Support I&RTS Descriptive Information**
 - **Conflicts and Software/File Dependencies**
 - **System Requirements**
 - **Shared Files, File Attributes, Permissions**
 - **Version Control**
 - **COE Services**
- **Must Be Logo Compliant and Prepare for Windows 2000**
 - **Developer Information**
 - **Versions**
 - **Release Notes and Help Files**
 - **Efficient Use of Registry**

Use of InstallShield for Navy Evaluation

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- **Support NT Logo Compliance**
 - **Authoring Windows 2000 Installer Templates for Microsoft**
- **Support for Web Installation**
- **Support for Java**
- **Scriptable Language Interface for Flexibility**
- **Allows for 3rd Party Application Execution within InstallShield**
- **Supplies and Registers Uninstall File**
- **Supports Silent and User Interactive Installations**
- **Checks for User Privilege Level and Acts Accordingly**

Recommend Extensible Markup Language (XML) Use as

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- **Descriptor File Format**
 - **WWW Emerging Standard**
- **Human Readable Format that Allows Personalized Cascading Styles Sheets that Can Customize User Views**
- **Supports User Defined Tags through Document Type Definitions (DTDs)**
 - **Provides Blue Print for Tags and Grammar to XML Parsers**
 - **New Tags Can be Added Without Need for Updated Parser**
- **XML Parsers Are Available for Free**
 - **Microsoft, Java, Netscape, etc.**
- **Major Browser Developers Committed to XML**
- **XML is Language Independent**

DII COE 4.0 NT Installation Packaging Development Process

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- **Developer Obtains DII Install Wizard**
- **Developer Answers the Questions from the Wizard**
 - Standard DTD Dictates Questions
 - New Tags Can be Added to Meet New Requirements
- **Developer Executes the Packaging Program**
 - XML File Created
 - Logo Compliant Installation Script Created
- **Developer Runs Logo Compliant Installation Package (e.g. InstallShield)**
 - Applications Packaged for Distribution
 - XML File Included
- **User/Administrator Loads Package**
 - Add/Remove Applet, Web, DSP, etc.

DISA's DII COE Installer Backward Compatibility

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Approach

- XML IS Platform Independent
- Build an SDF to XML Translator
 - Relatively Easy with Little Risk
- For NT Applications that Only Use COEInstaller
 - Run SDF Conversion Utility
 - Open Wizard for Information Not In SDF
- For NT Applications that Use COEInstaller to Launch InstallShield
 - Run SDF Conversion Utility
 - Open Wizard and Rebuild Logo Compliance Information

Next Steps - Open Software Description (OSD)

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- **OSD is an Open Standard DTD that Defines Tags Specific to the Distribution of Software**
- **OSD can be Extended to Meet all I&RTS Requirements**
- **OSD can be Integrated with COTS Packaging and Delivery Mechanisms in a Seamless Manner**
- **OSD Support by the Commercial Community**
 - Marimba, Tivoli, Microsoft

Cross Platform Approach for DII COE V4.1

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- **Create Java Based Packaging Tool that is Operating System Independent but Hosts a Java Virtual Machine**
 - Create SDFs in Extended OSD Format
 - Create All Externally Required Project Files for COTS Installation Programs Use
- **InstallShield has Committed to Providing a Sun Java Version Installer**
- **Sun Is investigating Expanding Approach to Other UNIX Platforms**
- **Approach Allows DISA and Service the Ability to Send RFPs to Commercial Installation Tools Developers for Product Supporting OSD**

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Questions ?***

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